


**MODEL:** CMC-6027-42T | **DESCRIPTION:** ELECTRET CONDENSER MICROPHONE

**FEATURES**

- omnidirectional
- 2.7 mm height
- terminal mount


**SPECIFICATIONS**

| parameter                       | conditions/description              | min | typ | max    | units |
|---------------------------------|-------------------------------------|-----|-----|--------|-------|
| directivity                     | omnidirectional                     |     |     |        |       |
| sensitivity (S)                 | f = 1 kHz, 1 Pa, 0 dB = 1 V/Pa      | -45 | -42 | -39    | dB    |
| standard operating voltage (Vs) |                                     |     | 2   |        | Vdc   |
| max operating voltage           |                                     |     |     | 10     | Vdc   |
| output impedance (Zout)         | f = 1 kHz, 1 Pa                     |     | 2.2 |        | kΩ    |
| sensitivity reduction (ΔS-Vs)   | f = 1 kHz, 1 Pa, Vs = 2.0 ~ 1.5 Vdc |     | -3  |        | dB    |
| frequency (f)                   |                                     | 100 |     | 20,000 | Hz    |
| current consumption (IDSS)      | Vs = 2.0 Vdc, RL = 2.2 kΩ           |     |     | 0.5    | mA    |
| signal to noise ratio (S/N)     | f = 1 kHz, 1 Pa, A-weighted         |     | 57  |        | dBA   |
| dimensions                      | Ø6.0 x 2.7                          |     |     |        | mm    |
| material                        | Al                                  |     |     |        |       |
| terminal                        | solder pads                         |     |     |        |       |
| weight                          |                                     |     |     | 0.18   | g     |
| operating temperature           |                                     | -20 |     | 70     | °C    |
| storage temperature             |                                     | -20 |     | 70     | °C    |
| RoHS                            | 2011/65/EU                          |     |     |        |       |

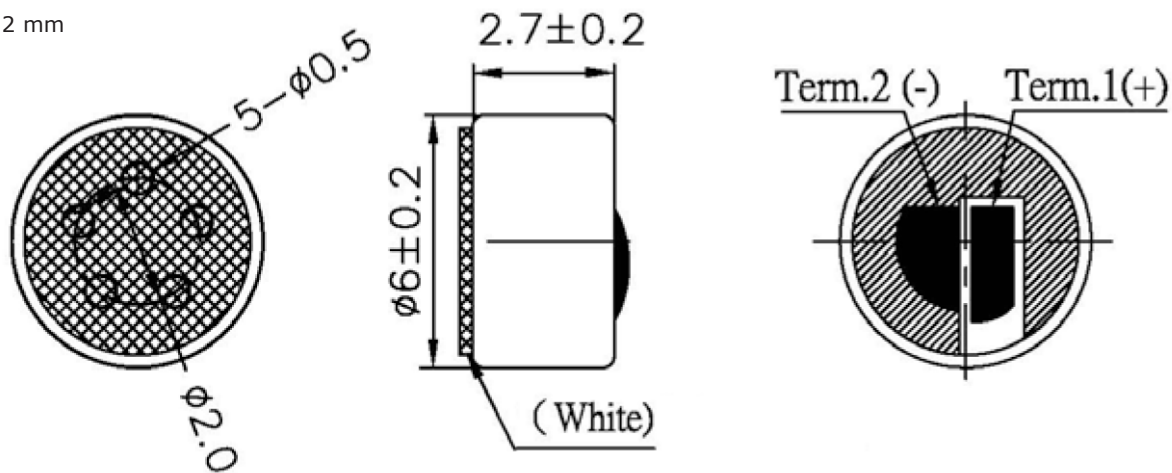
Notes: 1. We use the "Pascal (Pa)" indication of sensitivity as per the recommendation of I.E.C. (International Electrotechnical Commission). The sensitivity of "Pa" will increase 20 dB compared to the "ubar" indication. Example: -60 dB (0 dB = 1 V/ubar) = -40 dB (1 V/Pa)  
 2. All specifications measured at 5~35°C, humidity at 45~85%, under 86~106 kPa pressure, unless otherwise noted.

**SOLDERABILITY**

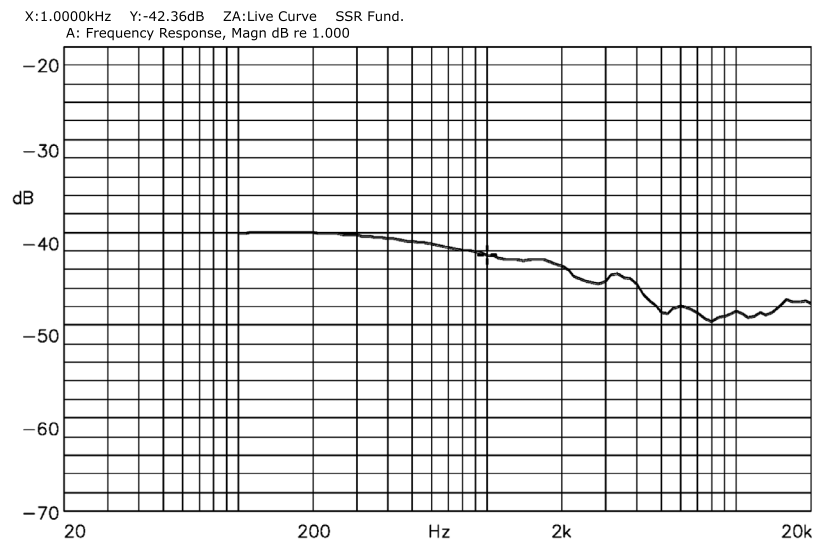
| parameter      | conditions/description | min | typ | max | units |
|----------------|------------------------|-----|-----|-----|-------|
| hand soldering | for 2 ± 0.5 seconds    | 270 | 280 | 290 | °C    |

## MECHANICAL DRAWING

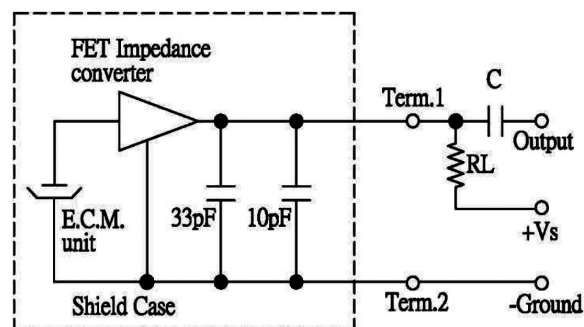
units: mm  
tolerance:  $\pm 0.2$  mm



## FREQUENCY RESPONSE CURVE



## MEASUREMENT CIRCUIT

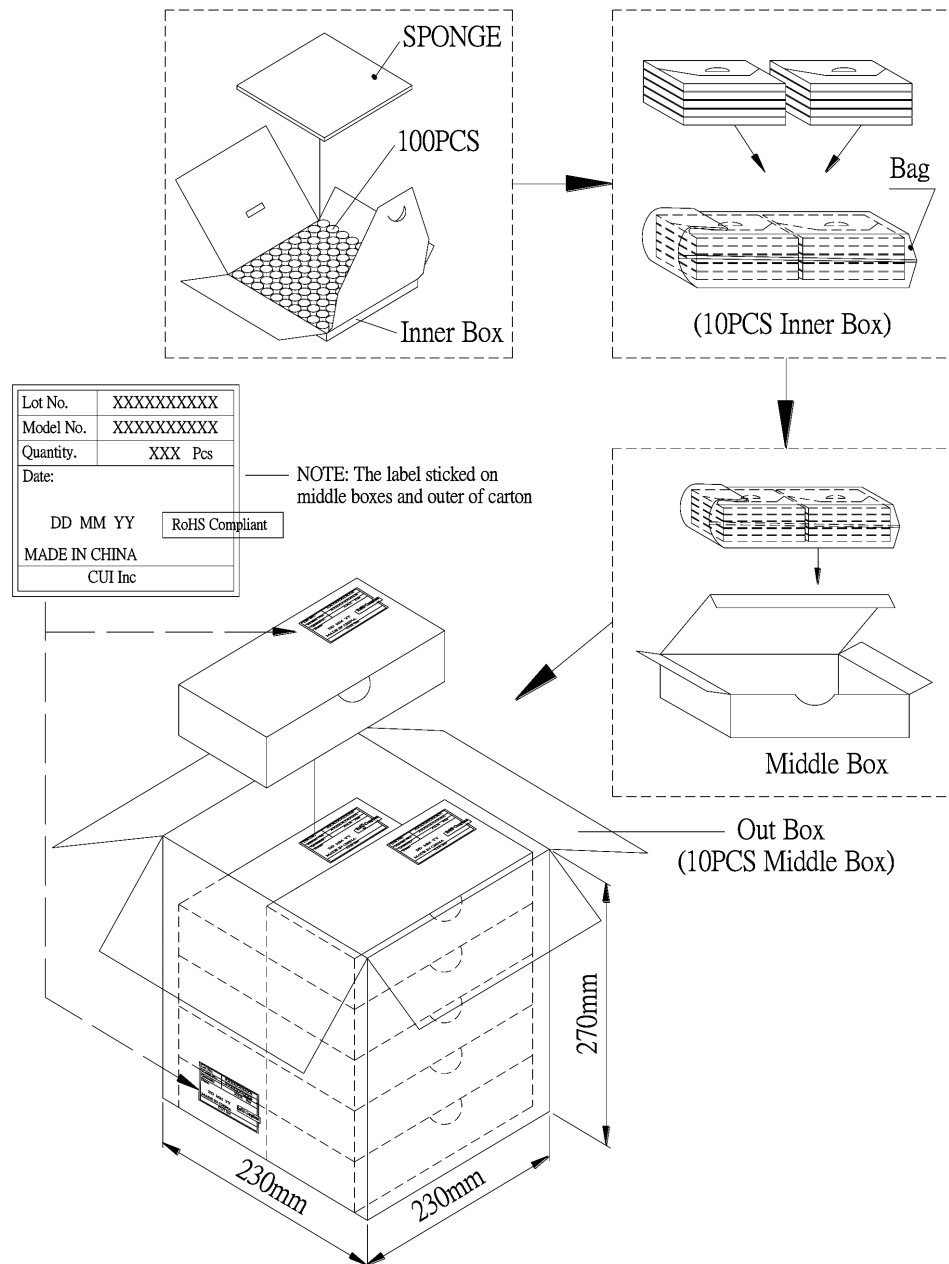


$R_L = 2.2 \text{ k}\Omega$   
 $C = 1 \text{ }\mu\text{F}$

## PACKAGING

units: mm

Inner Box Size: 100 x 100 x 8 mm  
Middle Box Size: 205 x 106 x 52 mm  
Outer Box Size: 230 x 230 x 270 mm  
Inner Box QTY: 100 pcs per box  
Middle Box QTY: 1,000 pcs per box  
Outer Box QTY: 10,000 pcs per box



## REVISION HISTORY

| rev. | description         | date       |
|------|---------------------|------------|
| 1.0  | initial release     | 11/04/2016 |
| 1.01 | altered sound holes | 07/03/2019 |

The revision history provided is for informational purposes only and is believed to be accurate.

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CUI offers a one (1) year limited warranty. Complete warranty information is listed on our website.

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